

# Kylie R. Lin

*Doctoral Student, Human-Centered Computing  
School of Interactive Computing, Georgia Institute of Technology*

klin368@gatech.edu  
kylierlin.github.io

## RESEARCH INTERESTS

Information Visualization, Human Cognition, Trust in Automated Systems, Research Methods.

---

## EDUCATION

Atlanta, GA  
2023 – Present  
**Georgia Institute of Technology**  
Ph.D. in Human-Centered Computing  
Advisor: Cindy Xiong Bearfield  
GPA: 4.0 / 4.0

Evanston, IL  
2019 – 2023  
**Northwestern University**  
B.S. in Communication Studies & Cognitive Science  
Minor in Data Science | Module in Digital Media  
Advisors: David Rapp, Steven Franconeri  
magna cum laude, SoC Dean's List (all eligible terms), Lambda Pi Eta Honor Society  
GPA: 3.98 / 4.0

## RESEARCH EXPERIENCE

Atlanta, GA  
2023 – Present  
**Georgia Institute of Technology**  
Graduate Student Researcher | VisualizaXiong Lab  
Advisor: Cindy Xiong Bearfield  
Studying how design choices impact people's perception of data visualizations and metrics to assess people's trust in automated systems.

Los Altos, CA  
Summer 2024  
**Toyota Research Institute**  
Applied Behavioral Science Research Intern | Human-Centered AI Team  
Advisor: Laura Libby  
Conducted research on vehicle owners' perceptions of electric vehicle battery degradation, identifying methods to mitigate misunderstanding.

Evanston, IL  
2022 – 2023  
**Northwestern University**  
Student Researcher | Reading Comprehension Lab  
Advisor: David Rapp  
Conducted an honors thesis on the impact of visual complexity on people's comprehension of data visualizations and their confidence in their comprehension.

2020 – 2023  
**Research Assistant | Visual Thinking Lab**  
Advisor: Steven Franconeri  
Conducted research at the intersection of human cognition and data visualization.  
Co-authored a paper on chart alignment impacting human comparisons to IEEE TVCG.


Spring 2021	<b>Research Assistant   Social Media Lab</b> Advisor: Jeremy Birnholtz Developed a codebook for qualitative survey data using data-driven open coding for a project on how young people disclose sensitive health information online.
Summer 2022	<b>SiriusXM</b> <b>User Experience Research Intern   Automotive Experience Design Team</b> Manager: Katie Bessière Developed a framework for competitive benchmarking research. Successfully executed benchmarking studies: Handled the recruitment and live interviewing of 12 participants via UserTesting software.

## PUBLICATIONS

### CONFERENCE PUBLICATIONS

**Lin, K.**, Stokes, C. & Xiong Bearfield, C. (2025). Write, Rank, or Rate: Comparing Methods for Studying Visualization Affordances. *IEEE Transactions on Visualization and Computer Graphics*.

**Lin, K.**, Li, J., Sparks, J., Filipowicz, A., Shamma, D. & Libby, L. (2025). SOH Illusion: Misunderstandings of EV Battery State of Health and Methods to Promote Understanding. *Proceedings of the 17th International Conference on Automotive User Interfaces and Interactive Vehicular Applications*.

 **Best Paper Honorable Mention (Top 10%)**

**Lin, K.**, Ru, S. S., Rapp, D. N., Guan, H. & Xiong Bearfield, C. (2025). What Makes a Visualization Visually Complex? In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*.

**Lin, K.**, Stokes, C. & Xiong Bearfield, C. (2025). LLMs Are Not Reliable Human Proxies to Study Affordances in Data Visualizations. *2nd HEAL Workshop at CHI Conference on Human Factors in Computing Systems (HEAL @ CHI 2025)*.

Xiong, C., Setlur, V., Bach, B., **Lin, K.**, Koh, E., Franconeri, S. (2021). Visual Arrangements of Bar Charts Influence Comparisons in Viewer Takeaways. *IEEE Transactions on Visualization and Computer Graphics*.

### JOURNAL PUBLICATIONS

Wang, H. W., Cohen, A., Nobre, C., **Lin, K.**, Zwald, Z., Kennedy, R., & Xiong Bearfield, C. [In Submission] Do You “Trust” This Visualization? An Inventory to Measure Trust in Visualizations. *IEEE Transactions on and Computer Graphics*.

### POSTERS

**Lin, K.**, Ru, S., Rapp, D., Guan, H., Bearfield, C. X. (2024). What Makes a Visualization Complex? Exploring Design Features Related to Visual Complexity. [Poster session]. *IEEE Visualization and Visual Analytics Conference*.

**Lin, K.**, Rapp, D., Xiong, C. (2023). Does Visual Complexity Impact Reader Comprehension and Confidence of Data Visualizations? [Poster session]. *Psychonomic Society*.

Awad, M. F., **Lin, K.**, & Franconeri, S. L. (2023). Mixed Graph Designs Do Not Improve Visual Memory. *Journal of Vision*, 23(9), 5781-5781.

**Lin, K.**, Rapp, D., Xiong, C. (2023). The Effect of Visual Complexity on Confidence and Comprehension in Visualization Experiences. [Poster session]. *Northwestern Cog Sci Fest*.

Awad, M., **Lin, K.**, & Franconeri, S. (2022). Does using a diversity of graph types help your audience remember your data?. *Journal of Vision*, 22(14), 4279-4279.

**Lin, K.**, Xiong, C., Rapp, D. (2022). Attempts to Augment Refutation Text Benefits with Visualizations. [Poster session]. *Northwestern Undergraduate Research & Arts Exposition*.

**Lin, K.**, Awad, M.F., Franconeri, S. (2022). The Effects of Visual Diversity in Series of Charts. [Poster session]. *Northwestern Cog Sci Fest*.

## INVITED TALKS

Atlanta, GA  
May 2025      **Conceptualizing Visual Complexity and Trust in Data Visualizations**  
CODA AI Synapse, Atlanta, Georgia, USA (hosted by Jitesh Jain)

Schloss Dagstuhl  
Oct. 2024      **Quantifying Perceptions of Visual Complexity with Data Visualization Design Features**  
Artificial and Human Intelligence, Schloss Dagstuhl, Germany (hosted by Mehul Bhatt)

## FELLOWSHIPS & AWARDS

- 2025    Best Paper Honorable Mention (ACM AutoUI 2025)
- 2023    Northwestern Communication Studies Excellence Award for Undergraduate Students
- 2022    MinneAnalytics Scholarship (\$500)
- 2021    2nd Place, Women in Data Science Datathon, Chicago
- 2021    Northwestern Cognitive Science Summer Undergraduate Research Fellowship (\$3500)
- 2021    Northwestern OUR Summer Undergraduate Research Grant (\$3500, awarded but declined)
- 2020    1st Place, Northwestern Data Visualization Contest  
          *Interactive global map depicting the number of COVID-19 cases over time using RShiny.*  
          *Submission published to university archives, see [here](#).*
- 2020    Finalist, McCormick Design-a-Thon  
          *Conducted market research and created a wireframe for an app promoting safe social interactions for university students in the time of COVID-19.*
- 2019    Clara Tao Memorial Scholarship (\$1000)
- 2017    National Merit Commended Scholar

## INTERNATIONAL VISITING & DEVELOPMENT

Schloss Dagstuhl  
Fall 2024      **Training Forum on Artificial and Human Intelligence**  
Host: Mehul Bhatt  
Presented an in-progress research project on using visualization design features to model perceived visual complexity in visualizations.

## ACADEMIC SERVICES

### CONFERENCE REVIEWER

2025    ACM Conference on Human Factors in Computing Systems (CHI)  
2024    ACM Conference on Human Factors in Computing Systems (CHI)  
2021    ACM Creativity and Cognition

## TEACHING EXPERIENCE

### Teaching Assistant

Fall 2025      Principles of Data Visualization (GATech)  
Spring 2023    Data Science Project (NU)  
2022 – 2023    Data Visualization (NU)  
Winter 2021    Persuasive Images: Rhetoric in Popular Culture (NU)

### Peer Mentor

Fall 2021      Communication & Technology (NU)

## ADDITIONAL PROFESSIONAL EXPERIENCE

Belmont, CA  
2021 – 2022      **Just One Cookbook**  
Operations Analyst  
Managers: Shen Chen, Namiko Chen  
Co-coordinated the launch of an online subscription membership program (JOC Plus) by designing site pages, advertisements, and by helping facilitate a soft launch.

2020 – 2021      **Digital Media Intern**  
Conducted research on global site traffic using R/RStudio and Google Search Console.

Evanston, IL  
2020 – 2021      **North by Northwestern**  
Graphics Editor & Social Media Graphics Coordinator  
Taught weekly design lessons covering design principles, Adobe CC basics, accessibility design, 3D graphics, and more to undergraduate students.

Remote Summer 2020	<b>Paravane Ventures</b> <b>Market Research &amp; Strategy Case Analyst</b>  Analyzed the UX/UI and website of the company Product Alliance and the online market for product management courses.
Evanston, IL Summer 2018	<b>Northwestern-Medill Journalism Institute</b> <b>Student Journalist</b>  Residency for U.S. and international students. Included writing, video production, ethics, and digital media.

## RELEVANT COURSEWORK

### Georgia Institute of Technology

#### Human-Computer Interaction

Principles of Data Visualization (CS 6730)  
Information Visualization (CS 7450)  
Human-Centered Data Analysis (CS 7451)  
Prototyping Interactive Systems (CS 6452)

#### Social Computing

Design of Online Communities (CS 6470)

### Northwestern University

#### Data Science & Visualization

Data Science I-III (STAT 301-I, 301-2, 301-3)  
Data Visualization (STAT 302)  
Information Visualization (COMM ST 395)

#### Programming

Fundamentals of Computer Programming I-II (CS 111, 211)  
Introduction to Artificial Intelligence (CS 348)  
Introduction to Cognitive Modeling (COG SCI 207)

#### Research Methods

Evaluating Evidence (COG SCI 202)  
Cognitive Science Proseminar (COG SCI 366)  
Research Seminar (COMM ST 394)  
Presenting Ideas and Data (COG SCI 345)

## SELECT SKILLS

### HUMAN-SUBJECTS RESEARCH

Survey studies: Qualtrics, Prolific, Amazon Mechanical Turk  
Eye tracking studies: EyeLink 1000 eye tracker

#### Qualitative data analysis

Thematic analysis  
data-driven open coding  
semi-structured interviewing

#### Quantitative data analysis

R/RStudio/RShiny  
Python (pandas, sci-kit learn, Jupyter Notebooks)

### PROGRAMMING

Python	Arduino	Processing
HTML/CSS	C/C++	Javascript

### Data Visualization Libraries/Tools

D3.js	Tableau
matplotlib, seaborn	PowerBI
ggplot2	

### DESIGN

Adobe Creative Suite: Photoshop, Illustrator, Premiere, After Effects, Dimension, XD

Microsoft 365: Excel, Powerpoint, Word

Google Workspace: Drive, Sheets, Docs, Slides, Colab

Figma, Miro